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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,815	09/22/2000	Migaku Suzuki	K-1926	1115
7590 02/03/2004				
Kanesaka and Takeuchi Suite 2 1423 Powhatan Street Alexandria, VA 22314				
EXAMINER GUARRIELLO, JOHN J				
ART UNIT PAPER NUMBER				
1771				

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/667,815

Applicant(s)

SUZUKI ET AL.

Examiner

John J. Guarriello

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

15. The Examiner acknowledges the appeal brief of 9/25/2003 and with this action withdraws the final rejection of 4/9/2003 and continues prosecution with the present action on the merits. The Examiner notes that the error in the final rejection was the misinterpretation of the hot-melt adhesive as a bonding agent as a mesh which EP'349 was lacking as a secondary reference.

16. In view of the appeal brief filed on 9/25/2003, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted.

See 37 CFR 1.193(b)(2)

***Claim Rejections - 35 USC § 112***

17. The following is a quotation of the second paragraph of 35 U.S.C.

112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

18. Claims 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

19. Claims 13-15 are rejected because of the following : It is not clear from the specification, pages 3 and 4, what the phrase in claim 13, lines 3-9, "solid SAP partly disposed in the voids and distributed almost all over in layers" means.

Furthermore, in claim 13, lines 8-10, it is not clear what the phrase "second fibrous network in a form of looser mesh positioned over said first fibrous network" means.

In claim 14, lines 2 and 3, it is not clear what the phrase "dual fibrous network substantially entirely covers the solid SAP" means.

In claim 15, lines 2-3, it is not clear what the phrase "fibers of said hot-melt layer of dense mesh are finer than the fibers of said hot-melt layer of loose mesh" mean. The meanings are not apparent to one of ordinary skill since the terms of "dense mesh are finer" and the terms of "loose mesh" are somewhat relative terms to which the instant specification does not clarify.

***Claim Rejections - 35 USC § 103***

20. Claims 1-5, 7-9, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/25999 in view of Brady et al. 5,217,798.

WO 98/25999 (disclosure of EP 947549 is in the same Patent Family and is utilized as a translation of WO'999) describes composite compositions which are highly absorbent with absorbent sheets, (see cites from EP'549, abstract). WO'999 describes the SAP, super absorbent polymer, (page 2, lines 34-58). WO'999 describes a non-woven **bulky substrate fabric** for supporting the SAP particles, (page 8, lines 19-58). WO'999 describes at least a two-layer structure with a bulky layer of the non-woven fabric with SAP particles, (page 9, lines 15-50). WO'999 describes adhesion between the sheets or layers

can be accomplished with some aspect of bonding, (page 14, lines 5-10). WO'999 describes a micro-network of HFFM fixing the SAP particles in position, (page 6, lines 30-35). It is the Examiner's position that the claimed invention requires at least a layer or sheet with SAP particles bonded with an adhesive (corresponding to the HFFM net or network) to another layer or sheet with absorbent properties for the composite absorbent article.

WO'999 describes the absorbent composition but differs since it is silent about the mesh but describes HFFM as a micro network behaving in the form of an adhesive and about the amount of adhesive and the fineness of the fibers. WO'999 describes fine fibrils in the form of microfibrils intertwined with the SAP particles which corresponds to the loose mesh or net of adhesive between the layers or sheets, (see page 14, lines 5-55).

Brady describes absorbent articles with adhesives for bonding superabsorbent particulate materials onto non-woven substrates, (see abstract; column 1, lines 6-18). Brady describes bonding between the superabsorbent particulate materials and a non-woven with

(column 2, lines 27-32) vinyl acetate adhesives, corresponding to hot melt EVA, (ethylene vinyl acetate) among others, (column 2, lines 4-11, 23-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the hot melt EVA adhesive of Brady for the net of HFFM of WO'999 and to optimize the amount of the adhesive component motivated with the expectation that there would be enhanced bonding between the sheet or layers results, so that there would be the better absorption of liquid, (page 16, lines 46-47), WO'999. Regarding the fineness of the fibers, WO'999 describes the microfibrils which overlaps the fineness of the fibers by the definition of microfibrils.

Applicant's arguments regarding the hot melt adhesive have been considered but the **combination** of references taken as whole especially Brady which describes bonding between the superabsorbent particulate materials and a non-woven with vinyl acetate adhesives strongly suggest the claimed invention as noted above in paragraph #18 above to one of ordinary skill in the art.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone number is 571-272-1476 the examiner can normally be reached on Monday to Friday from 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on 571-272-1478 the phone number for the organization where this application or proceeding is assigned is 703-872-9306

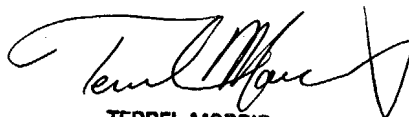
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994

John J. Guarriello:gj

Patent Examiner

January 21, 2004

January 26, 2004

  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700